

## REMARKS

### Status of the claims

Claims 3-10 are pending and under consideration in this application. Claims 3-6 are allowed and claims 7-10 are rejected. Claims 7 and 10 are amended to correct the designations of the strains specified by the claims; in the Amendment and Response filed April 2, 2004, these strains were, by inadvertent error, incorrectly designated. The amendments made to claims 7 and 10 herein are supported by the specification (e.g., at page 10, lines 14-23) and add no new matter. After entry of the present amendments, claims 3-10 will be pending and under consideration in this application.

### 35 U.S.C. § 112, first paragraph, rejection

Claims 7-10 are rejected on the ground that they are allegedly not enabled by the specification.

From the comments on page 2, line 18, to page 3, line 5, of the Office Action, Applicants understand the Examiner's position to be that enablement of the instant claims requires that a deposit of the of the transformant strains W303/YEp-MUR1-HA and W303/YEp-MUR1-HA, pYO-AtFX-Myc. While not necessarily agreeing with this position, Applicants point out that deposits under the Budapest Treaty of the two strains were indeed made and that copies of appropriate receipts from the depository were filed with the application on March 25, 2002.

In addition, Applicants understand from the comments on page 3, lines 6-12, of the Office Action that, since deposits were made under the Budapest Treaty, the deposit requirement will be met by an affidavit or declaration by Applicants stating that the relevant materials have been deposited under the Budapest Treaty and that the deposited materials will be irrevocably and without restriction or condition released to the public upon issuance of the patent. Applicants note that such an affidavit or declaration may be signed by the Applicant or the assignee of an application (MPEP § 2411). Applicants enclose herewith: (a) additional copies of the receipts (in the Japanese language) and translations (in the English language) of the receipts (Exhibit A); and (b) a declaration signed by a representative of the assignee of the instant

Applicant : Ken-ichi Nakayama et al.  
Serial No. : 10/089,014  
Filed : March 25, 2002  
Page : 5 of 6

Attorney's Docket No.: 11283-019US1 / PH-935PCT-  
US

application making the requisite statements regarding the availability of the deposited materials to the public (Exhibit B).

In light of the above considerations, Applicants respectfully request that the rejection under 35 U.S.C. § 112, first paragraph, be withdrawn.

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Page : 6 of 6

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US

### CONCLUSION

In summary, for the reasons set forth above, Applicants maintain that the pending claims patentably define the invention. Applicants request that the Examiner reconsider the rejections as set forth in the Office Action, and permit claims 7-10, like claims 3-6, to pass to allowance.

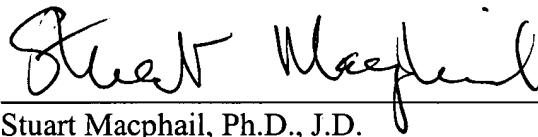
If the Examiner would like to discuss any of the issues raised in the Office Action, Applicants' undersigned representative can be reached at the telephone number listed below.

Please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 11283-019US1.

Respectfully submitted,

Date: \_\_\_\_\_

9/1/04



Stuart Macphail, Ph.D., J.D.  
Reg. No. 44,217

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45 Rockefeller Plaza, Suite 2800  
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Facsimile: (212) 258-2291

特許手続上の微生物の寄託の国際的承認  
に関するブダペスト条約

下記国際寄託当局によって規則 7. 1 に従い  
発行される。

### 原寄託についての受託証

氏名 (名称)

工業技術院生命工学工業技術研究所長  
大箸 信一

寄託者

あて名 〒

茨城県つくば市東 1 丁目 1 番 3

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BUDAPEST TREATY ON THE INTERNATIONAL  
RECOGNITION OF THE DEPOSIT OF  
MICROORGANISMS FOR THE PURPOSES OF  
PATENT PROCEDURE

RECEIPT IN THE CASE OF AN ORIGINAL  
DEPOSIT

issued pursuant to Rule 7.1 by the  
INTERNATIONAL DEPOSITARY AUTHORITY  
identified at the bottom of this  
page.

1. 微生物の表示	
(寄託者が付した識別のための表示) W303/YEp-MUR1-HA	(受託番号) FERM BP- 7107
2. 科学的性質及び分類学上の位置	
1 欄の微生物には、次の事項を記載した文書が添付されていた。 <input checked="" type="checkbox"/> 科学的性質 <input type="checkbox"/> 分類学上の位置	
3. 受領及び受託	
本国際寄託当局は、平成 11 年 11 月 17 日 (原寄託日) に受領した 1 欄の微生物を受託する。	
4. 移管請求の受領	
本国際寄託当局は、平成 11 年 11 月 17 日 (原寄託日) に 1 欄の微生物を受領した。 そして、平成 12 年 3 月 28 日に原寄託よりブダペスト条約に基づく寄託への移管請求を受領した。 (平成 11 年 11 月 17 日に寄託された微工研菌寄第 P- 17649 号より移管)	
5. 国際寄託当局	
通商産業省工業技術院生命工学工業技術研究所 National Institute of Bioscience and Human-Technology 名称: Agency for Industrial Science and Technology 所長 大箸 信一 Dr. Shinichi Ohnishi Director-General あて名: 日本国茨城県つくば市東 1 丁目 1 番 3 号 (郵便番号 305-8566) 1-3, Higashi 1-chome Tsukuba-shi Ibaraki-ken. 305-8566, JAPAN 平成 12 年 (2000) 3 月 29 日	

## INTERNATIONAL FORM

**BUDAPEST TREATY ON THE INTERNATIONAL  
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MICROORGANISMS FOR THE PURPOSES OF  
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**RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT**

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identified at the bottom of this page.

## TO DEPOSITOR:

Name: Dr. Shinichi OHASHI, Director-General of National Institute of  
Bioscience and Human-Technology Agency of  
Industrial Science and Technology  
Address: 1-3, Higashi 1-chome, Tsukuba-shi, Ibaraki-ken

<b>1. IDENTIFICATION OF MICROORGANISM</b>	
Identification Reference Given by the Depositor: W303/YEp-MUR1-HA	Accession Number: FERM BP-7107
<b>2. A SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC POSITION</b>	
The microorganism identified under 1 above was accompanied by a document stating the following item(s).	
<input checked="" type="checkbox"/> A Scientific Property <input type="checkbox"/> Taxonomic Position	
<b>3. RECEIPT AND ACCEPTANCE</b>	
This International Depositary Authority accepts the microorganism identified under 1 above, which was received on November 17, 1999. (date of the original deposit)	
<b>4. RECEIPT OF REQUEST FOR TRANSFER</b>	
This International Depositary Authority received the microorganism under 1 above on November 17, 1999 (date of the original deposit), and received on March 28, 2000, a request for transfer from the original deposit to the deposit under the Budapest treaty. (Transferred from FERM P-17649 deposited on November 17, 1999)	
<b>5. INTERNATIONAL DEPOSITARY AUTHORITY</b>	
Name: National Institute of Bioscience and Human-Technology Agency of Industrial Science and Technology	
Representative: <u>Shinichi OHASHI</u> (sealed) Dr. DIRECTOR GENERAL.	
Address: 1-3, Higashi 1-chome, Tsukuba-shi, Ibaraki-ken 305-8566, JAPAN	
Date: March 29, 2000	

BUDAPEST TREATY ON THE INTERNATIONAL  
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## 原寄託についての受託証

氏名 (名称) 工業技術院生命工学工業技術研究所長  
大箸 信一

寄託者

あて名 〒

茨城県つくば市東 1 丁目 1 番 3

殿

1. 微生物の表示	
(寄託者が付した識別のための表示) W303/YEp-MUR1-HA, pYO-A:FX-Myc	(受託番号) FERM BP- 7108
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5. 国際寄託当局	
通商産業省工業技術院生命工学工業技術研究所  National Institute of Bioscience and Human-Technology 名称: Agency of Industrial Science and Technology  所長 大箸 信一 Dr. Shinichi Ohashi Director-General  あて名: 日本国茨城県つくば市東 1 丁目 1 番 3 号 (郵便番号 305-8566) 1-3, Higashi 1 chome Tsukuba-shi Ibaraki-ken 305-8566, JAPAN  平成 12 年 (2000) 3 月 28 日	

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Industrial Science and Technology  
Address: 1-3, Higashi 1-chome, Tsukuba-shi, Ibaraki-ken

<b>1. IDENTIFICATION OF MICROORGANISM</b>	
Identification Reference Given by the Depositor: W303/YEp-MUR1-HA, pYO-AtFX-Myc	Accession Number: FERM BP-7108
<b>2. A SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC POSITION</b>	
The microorganism identified under 1 above was accompanied by a document stating the following item(s).	
<input type="checkbox"/> A Scientific Property <input type="checkbox"/> Taxonomic Position	
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<b>5. INTERNATIONAL DEPOSITARY AUTHORITY</b>	
Name: National Institute of Bioscience and Human-Technology Agency of Industrial Science and Technology	
Representative: <u>Shinichi OHASHI</u> (sealed) Dr. DIRECTOR GENERAL.	
Address: 1-3, Higashi 1-chome, Tsukuba-shi, Ibaraki-ken 305-8566, JAPAN	
Date: March 28, 2000	

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大箸 信一

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寄託者

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5. 国際寄託当局	
通商産業省工業技術院生命工学工業技術研究所 National Institute of Bioscience and Human-Technology 名称: Agency of Industrial Science and Technology 所長 大箸 信一 Dr. Shinichi Ohsaka, Director-General あて名: 日本国茨城県つくば市東 1 丁目 1 番 3 号 (郵便番号 305-8566) 1-3, Higashi 1 chome Tsukuba-shi Ibaraki-ken 305-8566, JAPAN 平成 12 年 (2000) 3 月 28 日	



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Address: 1-3, Higashi 1-chome, Tsukuba-shi, Ibaraki-ken

<b>1. IDENTIFICATION OF MICROORGANISM</b>	
Identification Reference Given by the Depositor: W303/pYO-AtFX-Myc	Accession Number: FERM BP-7109
<b>2. A SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC POSITION</b>	
<p>The microorganism identified under 1 above was accompanied by a document stating the following item(s).</p> <p><input checked="" type="checkbox"/> A Scientific Property <input checked="" type="checkbox"/> Taxonomic Position</p>	
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<b>5. INTERNATIONAL DEPOSITARY AUTHORITY</b>	
<p>Name: National Institute of Bioscience and Human-Technology Agency of Industrial Science and Technology</p> <p>Representative: <u>Shinichi OHASHI</u> (sealed) Dr. DIRECTOR GENERAL</p> <p>Address: 1-3, Higashi 1-chome, Tsukuba-shi, Ibaraki-ken 305-8566, JAPAN</p> <p align="right">Date: March 28, 2000</p>	

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of  
Ken-ichi NAKAYAMA et al.  
Serial No. 10/089,014  
Filed: March 25, 2002

Atty. Ref: 11283-019US1/PH-935PCT-US  
Group Art Unit: 1652  
Examiner: Manjunath N. Rao

**Re: GDP-4-KETO-6-DEOXY-D-MANNOSE-3,5-EPIMERASE-4-REDUCTASE  
GENE DERIVED FROM ARABIDOPSIS THALIANA**

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Honorable Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

**DECLARATION RE: DEPOSITED  
BIOLOGICAL MATERIALS**

Sir:

As a representative of the assignee of the U.S. Patent application identified above, I hereby declare:

That the assignee of this application is also the depositor and/or owner of the deposits of biological materials identified and referred to in the specification of this application.

That deposits of the materials have been made in a depository affording permanence of the deposit and ready accessibility thereto by the public if a patent is granted. The depository is the International Patent Organism Depository (IPOD), National Institute of Advanced Industrial Science and Technology, Japan (1-1, Higashi 1-chome, Tsukuba-shi, Ibaraki, Japan).

<u>Deposited materials</u>	<u>Specific accession number</u>
(S. cerevisiae)W303/YEp-MUR1-HA	FERM BP-7107
(S. cerevisiae)W303/YEp-MUR1-HA,pYO-AtFX-Myc	FERM BP-7108
(S. cerevisiae)W303/pYO-AtFX-Myc	FERM BP-7109

That the above-mentioned deposited materials have been accorded specific accession numbers respectively.

Page 2

That all restriction on availability to the public of the materials so deposited will be irrevocably removed upon the granting of a patent.

That the materials have been deposited under conditions that assure that access to the materials will be available during the pendency of the patent application to one determined by the Commissioner to be entitled thereto under 37 CFR 1.14 and 35 USC 122.

That the deposited materials will be maintained with all the care necessary to keep it viable and uncontaminated for a period of at least five years after the most recent request for the furnishing of a sample of the deposited microorganism, and in any case for a period of at least thirty (30) years after the date of deposit or for the enforceable life of the patent, whichever period is longer.

I declare further that all statements made therein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the instant patent application or any patent issuing thereon.

Dated this       day of *July 26*, 2004

National Institute of Advanced  
Industrial Science and Technology  
Intellectual Property Department

  
Yuzo MIHARA, Director